

REMARKS

Claims 1-20 are currently pending in the subject application and are presently under consideration. Claims 1, 5, 13, and 15 have been amended herein for clarity and to disclaim the cited art. Claims 2, 3, and 4, have been amended to overcome indefiniteness. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 2-4 Under 35 U.S.C. §112

Claims 2-4 stand rejected under 35 U.S.C. §112, second paragraph. Claims 2-4 have been amended herein to more clearly describe how the elements of the respective claims relate to independent claim 1. Accordingly, this rejection should be withdrawn.

II. Rejection of Claims 1-4, 6, and 13 Under 35 U.S.C. §102(e)

Claims 1-4, and 13 stand rejected under 35 U.S.C. §102(e) over Soenksen (US 6,711,283). To establish anticipation, each and every claim feature must be disclosed in a single cited art document. Claims 1 and 13 are directed to imaging systems where pixels are correlated or scaled to about the size of a diffraction limited spot. This type of mapping arrangement between pixel and sensor is in direct contravention to conventional systems that employ the Nyquist criterion to match optics with sensors. In particular, conventional Nyquist systems (2-1 digital sampling to reconstruct) map *two or more pixels* to each diffraction limited spot which degrades overall image performance. Soenksen fails to teach a scaling or mapping of a pixel to a single diffraction limited spot as claimed. Rather, Soenksen teaches conventional Nyquist matching of optics and sensor (see col. 10, lines 25-35). Since Soenksen does not teach an individual relationship of a single pixel to a diffraction limited spot, this rejection is respectfully requested to be withdrawn.

III. Rejection of Claims 1-4, 6, 8-10, 13, Under 35 U.S.C. §103(a)

Claims 1-4, 6, 8-10, and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa et al. (US 5,769, 076) in view of Vock, et al. (US 5,798,519). Claims 1 and 13 have been amended herein to recite a microscopic optical

system and a microscopic lens configuration, where at least one pixel in the sensor has been scaled or correlated to about the size of a diffraction-limited spot. Neither Maekawa nor Vock, alone or in combination, disclose such features. Maekawa although disclosing a microscopic system, does not teach a system where at least one pixel is mapped or scaled to about the size of a diffraction limited spot. Vock fails to teach a microscopic system or microscopic lens configuration as claimed and is completely unrelated to the recited claims. Vock relates to a system for determining the flight and distance of golf balls at a range equipped with a video camera. This type of video analysis for determining distances on a driving range is completely unrelated to the claimed invention which recites mapping diffraction limited spots at a *microscopic* level to about the size of a detector pixel. In other words, the video analysis system is not a digital microscope and *therefore it is impossible to map or scale pixels to a diffraction limited spot size in such a system*. Since Maekawa and Vock fail to teach each and every element of the claimed invention, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 5 Under 35 U.S.C. §103(a)

Claims 1-4, 6, 8-10, and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa et al. (US 5,769, 076) in view of Vock, et al. (US 5,798,519) and in further view of Drobot (US 2002/0110077). Drobot does not make up for the aforementioned deficiencies of Maekawa and Vock noted above. Moreover, Drobot describes a holographic lens which is completely different from the holographic diffuser recited in amended claim 5. Accordingly, withdrawal of this rejection is respectfully requested.

V. Rejection of Claims 7 and 14 Under 35 U.S.C. §103(a)

Claims 7 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa et al. (US 5,769, 076) in view of Vock, et al. (US 5,798,519) and in further view of Malmros (US 2003/0026762). Malmros does not make up for the aforementioned deficiencies of Maekawa and Vock noted above with respect to amended claim 1. In particular, Malmros fails to teach or suggest a digital microscope optical system or lens configuration that scales or correlates a diffraction limited spot to about

the size of *at least one pixel* at a microscopic level as recited in claim 1 from which claim 5 depends. As such, withdrawal of this rejection is respectfully requested.

VI. Rejection of Claims 11 and 12 Under 35 U.S.C. §103(a)

Claims 7 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa et al. (US 5,769, 076) in view of Vock, et al. (US 5,798,519) and in further view of Soenksen, et al. (US 6,711,283). Soenksen et al. does not make up for the aforementioned deficiencies of Maekawa and Vock noted above with respect to amended claim 1. In particular, Soenksen et al. fails to teach or suggest a digital microscope optical system or lens configuration that scales a diffraction limited spot to about the size of *at least one pixel* at a microscopic level as recited in claim 1 from which claims 11 and 12 depend. Withdrawal of this rejection is respectfully requested.

VII. Rejection of Claims 15-20 Under 35 U.S.C. §103(a)

Claims 15-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Malmros (US 2003/0026762) in view of Vock, et al. (US 5,798,519). Neither Malmros nor Vock, alone or combination, teach all the elements recited in amended claim 15. In particular, Malmros and Vock fail to teach or suggest a microscopic optical medium that scales or correlates a diffraction limited spot to about the size of *at least one pixel* at a microscopic level as recited in claim 15. As such, withdrawal of this rejection is respectfully requested.

VIII. Petition for Extension of Time

A request for a three month extension of time is hereby made (small entity status has been established). A Credit Card charge form is enclosed herewith to pay the petition fees.

CONCLUSION

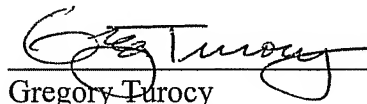
The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP



Gregory Turocy
Reg. No. 36,952

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731